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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/051,565	06/08/1998	DIRK SELDESCHTS	98227	8146
7590	10/21/2003			EXAMINER
BACHMAN & LAPOINTE 900 CHAPEL STREET SUITE 1201 NEW HAVEN, CT 065102802			SHERRER, CURTIS EDWARD	
			ART UNIT	PAPER NUMBER
			1761	

DATE MAILED: 10/21/2003

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Paper No. 31

Application Number: 09/051,565

Filing Date: June 08, 1998

Appellant(s): SELDESLACHTS, DIRK

Barry L. Kelmachter  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 05/22/03.

**MAILED**  
OCT 20 2003  
**GROUP 1**

**(1) *Real Party in Interest***

A statement identifying the real party in interest is contained in the brief.

**(2) *Related Appeals and Interferences***

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

**(3) *Status of Claims***

The statement of the status of the claims contained in the brief is correct.

**(4) *Status of Amendments After Final***

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) *Summary of Invention***

The summary of invention contained in the brief is correct.

**(6) *Issues***

The appellant's statement of the issues in the brief is correct.

**(7) *Grouping of Claims***

Appellant's brief includes a statement that claims 28, 32, 33, 36-40, 48, 50, 53, and 55-70 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

**(8) *ClaimsAppealed***

A substantially correct copy of appealed claims 28, 32, 33, 35-48, 50, 53-70 appears on page 27 of the Appendix to the appellant's brief. The minor errors are as follows: claim 54 is cancelled.

**(9) *Prior Art of Record***

4,550,029 Kruger et al. 10-1985

Perry, R. H., Perry's Chemical Engineers' Handbook, 6th Ed., (1984) pp. 18-19 to 18-37

Admission of Applicants, page 1 of instant specification.

**(10) *Grounds of Rejection***

The following ground(s) of rejection are applicable to the appealed claims:

Claims 28, 32, 33, 35-48, 50, and 53-70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admissions in view of Kruger *et al.* (U.S. Pat. No. 4,550,029) ("Kruger") in further view of Perry's Chemical Engineering Handbook (pages 18-19 to 18-37) ("Perry").

Applicant admits (page 1) the well known processing of beer wort to remove unwanted volatile flavors. Applicant does not disclose the specifically claimed apparatus is old.

Kruger teaches the injection of steam/inert gas into a wort "to degas and free the wort from undesirable foreign substances" (Abstract) and additionally saves energy. (Col. 1, line 56 to col. 2, line 19). An apparatus is associated with said boiling (Fig. 1) whereby the wort is sprayed in at the top while the steam/inert gas is injected into the bottom.

Perry teaches that which is common knowledge concerning packed columns, i.e., packed columns for gas-liquid contacting are use extensively for absorption operations and to a limited extent, distillations. Specifically, it discloses a schematic of a packed column (Fig. 18-33), general knowledge about support plates, including corrugations with orifices, (pp. 18-25 to 18-270 and Figs. 18-46 to 18-48) whereby with "countercurrent type of support plate the free area for gas flow can range up to 90 percent of the column cross-sectional area," and general knowledge about liquid distribution (pp. 18-27 to 18-32 and Fig. 18-51).

Perry also teaches that these columns are usually filled with randomly oriented packing material and operated with counterflow of the phases. Perry states that a packed column "is a simple device compared with plate columns. Said columns are provided with a liquid distribution device designed to provide effective irrigation of the packing. Perry urges adding

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devices to provided redistribution of liquid that would otherwise channel down the wall. Several beds may be used. (Page 18-19).

Perry teaches the pros and cons of packed columns (PCs) with plate columns. *Id.*

Depending on the size of the column, PCs can be cheaper. Acidic mediums (beer has an acid pH of 5 to 5.5) are best treated in PCs. PCs have low liquid holdup.

It would have been obvious to those of ordinary skill in the art to perform the prior art process of the admitted prior art or Kruger in apparatus as taught Perry because said means are commonly used for separation processes taught by the prior art for the above stated reasons.

Perry shows support plates in Figs. 18-47 and 48 and discusses the type of liquid distributors on page 18-28 and in Fig. 18-51. Perry clearly shows that PCs are notoriously well known and extensively studied. Those in the brewing arts would be very familiar with these type of contactors. Claims drawn to the use of well known valves to control the process feeds are notoriously well known.

#### *(11) Response to Argument*

Appellant argues that the teachings of Perry would dissuade those in the art from using the column of Kruger. Perry modifies, and provides motivation to modify, the teachings of Kruger, i.e., use the separation of apparatus of Perry to obtain the results of Kruger. The instant rejection is formulated so that one of ordinary skill would find it obvious to use the packed columns of Perry in place, as a substitute, to the plate column of Kruger. There has never been any indication in any Office action, that the columns of Perry would be combined with the column of Kruger.

It is noted that appellant states that the wort contains solids and that said solids would cause cleaning problems with using a packed column as opposed to the column of Kruger. No proof has been presented to determine if there are actually solids in the wort, whether they are dissolved or undissolved, what size the solids are, and if they would in fact be the kind to create problems in the process. While appellant asserts that the burden of proof falls upon the Office, it is only the initial burden of providing the *prima facie* case of obviousness that must be shouldered by the Office. It is asserted that said combination of prior art supplies said case.

Further, if appellant is asserting that some other step is necessary to practice the instant invention, in order to avoid the asserted problems due to solids, then it should be disclosed and claimed.

Applicant discusses the amount of agitation, as disclosed by the prior art. Kruger appears to desire "considerable movement of the wort and an intensive formation of vapor bubbles therein." This is desired so as to "result[] in an advantageous fracture formation and stability of the beer." There is nothing in Kruger that supports the notion that foaming is desirable other than for the purpose of providing for the stability of the beer through intensive mixing. (Col. 3, lines 21-30). Perry suggests that packed columns are useful for liquids that tend to foam because there is a decreased amount of agitation. If the packed column did not obtain the same stripping results as prior art columns, those in the art would not utilize packed columns.

In other words, there's more than one way to skin a cat. Just because a second method has different operating characteristics from that of the prior art does not indicate to those of ordinary skill that the second method is ineffective in obtaining the results of the prior art. As Perry states, "[p]acked columns for gas-liquid contacting are used extensively for absorption

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operations." Kruger finds high agitation rates necessary to obtain optimum stripping because he is using a plate column.

For the first time, appellant argues that the prior art does not teach or make obvious the limitations of claims 32 and 59. See Perry, Fig. 18-47 where a chimney is provided at a height so as to allow gas to rise up through the descending liquid. As for claim 33, see Fig. 18-34. For claim 36, see Fig. 18-48. As for claims 37 and 38, page 18-31 discusses the use of spray nozzles for gas distribution in the bottom of the column. As for claim 39, because the apparatus used (as taught by Perry) is the same as claimed, the amount of foam formation would not be significant. Further, it appears that, in some claims, such as 39, that appellant is relying on process parameters to distinguish their apparatus claims, which is not persuasive.

With regard to claims 40 and 58, the limitation of being inclined, is merely a claim preference, but see Fig. 18-53. As for claim 48, appellant for the first time asserts that the control means are not notoriously well known. Appellant must seasonably traverse the well known statement during examination or the object of the well known statement is taken to be admitted prior art. *In re Chevenard*, 139 F.2d 71, 60 USPQ 239 (CCPA 1943). Because appellant is only now raising the issue, the use of control means is taken to be admitted prior art.

As for claim 55, the sizing of filler bodies is a result effective variable, as clearly demonstrated by Perry, and therefore those in the art would optimize their size in order to optimize the overall process. With regard to claim 56, Perry, as stated above teaches the use of several levels of filler bodies. See page 18-19. The limitations of claim 57 are taught in Fig. 18-48 and 18-51.

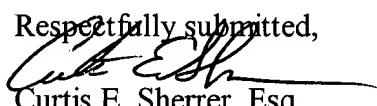
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As for the flow rates of the gas and the liquid (claims 60 and 61), these are notoriously well known result effective variables as demonstrated by Perry, and those in the art would optimize such variable so as to optimize the amount of undesirable volatiles, while maximizing the throughput. Claim 62 embodies process parameters that do not further limit the apparatus claims.

With regard to the process claims (claims 63-70), these claims repeat limitations found in the apparatus claims except for certain process limitations, i.e., temperature control, pressure control, and flow rates. All of these parameters are shown by Perry to be result effective variables well within the skill of those in the brewing art to optimize. See Figs. 18-35, 18-36, 18-37, 18-38, Table. 18-5, 18-7, 18-8, Fig. 18-44a and others. Perry broadly teaches or makes obvious all aspects of appellant's well known packed column.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

  
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Primary Examiner

October 17, 2003

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